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(21) International Application Number: PCT/US00/00641 (22) International Filing Date: 11 January 2000 (11.01.00) (30) Priority Data: 60/172,247 11 January 1999 (11.01.99) US 60/132,253 3 May 1999 (03.05.99) US 60/136,653 27 May 1999 (27.05.99) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 60/172,247 (CIP) Filed on 11 January 1999 (11.01.99) US 60/132,253 (CIP) Filed on 3 May 1999 (03.05.99) US 60/136,653 (CIP) Filed on 27 May 1999 (27.05.99) (71) Applicant (for all designated States except US): INCYTE PHARMACEUTICALS, INC. [US/US]; 3174 Porter Drive, Palo Alto, CA 94304 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): BANDMAN, Olga [US/US]; 366 Anna Avenue, Mountain View, CA 94043		(US). HILLMAN, Jennifer, L. [US/US]; 230 Monroe Drive #12, Mountain View, CA 94040 (US). TANG, Y., Tom [US/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). AZIMZAI, Yalda [US/US]; 2045 Rock Springs Drive, Hayward, CA 94545 (US). BAUGHN, Mariah, R. [US/US]; 14244 Santiago Road, San Leandro, CA 94577 (US). LAL, Preeti [US/US]; 2382 Lass Drive, Santa Clara, CA 95054 (US). YUE, Henry [US/US]; 826 Lois Avenue, Sunnyvale, CA 94087 (US). LU, Dyung, Aina, M. [US/US]; 55 Park Belmont Park, San Jose, CA 95136 (US). (74) Agents: HAMLET-COX, Diana et al.; Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, CA 94304 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published Without international search report and to be republished upon receipt of that report.	
(54) Title: HUMAN PEPTIDASES			
(57) Abstract			
The invention provides human peptidases (HPEP) and polynucleotides which identify and encode HPEP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of HPEP.			

Table 2 (cont.)

SEQ ID NO:	Amino Acid Residues	Potential Phosphorylation Sites	Potential Glycosylation Sites	Signature Sequences, Motifs, and Domains	Homologous Sequences	Analytical Methods
14	703	S20 S68 T120 T135 S331 T383 S562 S606 S607 S631 S674 S698 T31 S95 S115 S173 S355 S490 S562 S650	N318 N434 N445 N670	E1 ubiquitin activating enzyme: K352-H442	E1-like protein (ubiquitin activating enzyme) [Pichia pastoris] g4262402	MOTIFS BLAST BLIMPS
15	145	T36 S100 S115 T47	N34	Protease serine hydrolase precursor signal zymogen glycoprotein multigene family: L16-Q64, G87-K140 Trypsin: L25-Q64, S84-N142	Matrptase (serine protease) [Homo sapiens] g5359675, g6002714 Epithin (membrane bound serine protease) [Mus musculus] g4104970	MOTIFS BLAST BLIMPS
16	518	S74 T252 S151 T169 T245 S312 S361 T419 S462 S502 S16 S70 S98 S133 T301 S331 S428 T516 Y334	N234	Dipeptidyl peptidase IV: H255-L305, E326-Q352, E379-P411	Dipeptidyl peptidase IV [Stenotrophomonas maltophilia] g1753197	MOTIFS BLAST BLIMPS

Pro Thr Ser Leu Gly Leu Val Pro His Gln Ile Arg Gly Phe Leu		
	620	625 630
Ser Arg Phe Asp Asn Val Leu Pro Val Ser Leu Ala Phe Asp Lys		
	635	640 645
Cys Thr Ala Cys Ser Ser Lys Val Leu Asp Gln Tyr Glu Arg Glu		
	650	655 660
Gly Phe Asn Phe Leu Ala Lys Val Phe Asn Ser Ser His Ser Phe		
	665	670 675
Leu Glu Asp Leu Thr Gly Leu Thr Leu Leu His Gln Glu Thr Gln		
	680	685 690
Ala Ala Glu Ile Trp Asp Met Ser Asp Asp Glu Thr Ile		
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<212> PRT

<213> Homo sapiens

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<221> misc_feature

<223> Incyte ID No: 2634725CD1

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	20	25 30
Arg Val Ile Asn Gln Thr Thr Cys Glu Asn Leu Leu Pro Gln Gln		
	35	40 45
Ile Thr Pro Arg Met Met Cys Val Gly Phe Leu Ser Gly Gly Val		
	50	55 60
Asp Ser Cys Gln Val Ala Pro Gly Ala Gly Gly Arg Gln Val Gly		
	65	70 75
Pro Gly Arg Gly Gly Thr Gly Asp Ser Pro Ala Gly Leu Val Ser		
	80	85 90
Ala Gln Gly Asp Ser Gly Gly Pro Leu Ser Ser Val Glu Ala Asp		
	95	100 105
Gly Arg Ile Phe Gln Ala Gly Val Val Ser Trp Gly Asp Gly Cys		
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Ala Gln Arg Asn Lys Pro Gly Val Tyr Thr Arg Leu Pro Leu Phe		
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<223> Incyte ID No: 2643110CD1

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Ser	Trp	Arg	Ser	Phe	Ser	Leu	Asn	Ser	Glu	Gly	Ala	Glu	Arg	Met	20	25	30	
*Ala	Thr	Thr	Gly	Thr	Pro	Thr	Ala	Asp	Arg	Cys	Asp	Ala	Ala	Ala	35	40	45	
Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln	Val	Gln	Lys	His	Ser	Trp	50	55	60	
Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser	Arg	Lys	Tyr	Ser	Gly	65	70	75	
Leu	Ile	Val	Asn	Lys	Ala	Pro	His	Asp	Phe	Gln	Phe	Val	Gln	Lys	80	85	90	
Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr	Tyr	Leu	Gly	95	100	105	
Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser	Glu	Ile	110	115	120	
Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp	Lys	125	130	135	
Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr	140	145	150	
Ser	Arg	Glu	Glu	Glu	Leu	Leu	Arg	Glu	Arg	Lys	Arg	Leu	Gly	Val	155	160	165	
Phe	Gly	Ile	Thr	Ser	Tyr	Asp	Phe	His	Ser	Glu	Ser	Gly	Leu	Phe	170	175	180	
Leu	Phe	Gln	Ala	Ser	Asn	Ser	Leu	Phe	His	Cys	Arg	Asp	Gly	Gly	185	190	195	
Lys	Asn	Gly	Phe	Met	Val	Ser	Pro	Met	Lys	Pro	Leu	Glu	Ile	Lys	200	205	210	
Thr	Gln	Cys	Ser	Gly	Pro	Arg	Met	Asp	Pro	Lys	Ile	Cys	Pro	Ala	215	220	225	
Asp	Pro	Asp	Phe	Phe	Ser	Phe	Ile	Asn	Asn	Ser	Asp	Leu	Trp	Val	230	235	240	
Ala	Asn	Ile	Glu	Thr	Gly	Glu	Glu	Arg	Arg	Leu	Thr	Phe	Cys	His	245	250	255	
Gln	Gly	Leu	Ser	Asn	Val	Leu	Asp	Asp	Pro	Lys	Ser	Ala	Gly	Val	260	265	270	
Ala	Thr	Phe	Val	Ile	Gln	Glu	Glu	Phe	Asp	Arg	Phe	Thr	Gly	Tyr	275	280	285	
Trp	Trp	Cys	Pro	Thr	Ala	Ser	Trp	Glu	Gly	Ser	Glu	Gly	Leu	Lys	290	295	300	
Thr	Leu	Arg	Ile	Leu	Tyr	Glu	Glu	Val	Asp	Glu	Ser	Glu	Val	Glu	305	310	315	
Val	Ile	His	Val	Pro	Ser	Pro	Ala	Leu	Glu	Glu	Arg	Lys	Thr	Asp	320	325	330	
Ser	Tyr	Arg	Tyr	Pro	Arg	Thr	Gly	Ser	Lys	Asn	Pro	Lys	Ile	Ala	335	340	345	
Leu	Lys	Leu	Ala	Glu	Phe	Gln	Thr	Asp	Ser	Gln	Gly	Lys	Ile	Val	350	355	360	
Ser	Thr	Gln	Glu	Lys	Glu	Leu	Val	Gln	Pro	Phe	Ser	Ser	Leu	Phe	365	370	375	
Pro	Lys	Val	Glu	Tyr	Ile	Ala	Arg	Ala	Gly	Trp	Thr	Arg	Asp	Gly	380	385	390	
Lys	Tyr	Ala	Trp	Ala	Met	Phe	Leu	Asp	Arg	Pro	Gln	Gln	Trp	Leu	395	400	405	

Gln Leu Val Leu Leu Pro Pro Ala Leu Phe Ile Pro Ser Thr Glu
 410 415 420
 Asn Glu Glu Gln Arg Leu Ala Ser Ala Arg Ala Val Pro Arg Asn
 425 430 435
 Val Gln Pro Tyr Val Val Tyr Glu Glu Val Thr Asn Val Trp Ile
 440 445 450
 Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln Ser Glu Gly Glu
 455 460 465
 Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys Thr Gly Phe
 470 475 480
 Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln Gly Tyr
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 Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser Leu
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 515

<210> 17

<211> 476

<212> PRT

<213> Homo sapiens

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<223> Incyte ID No: 2701396CD1

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 35 40 45
 Arg Phe Lys Arg Ala Ile Phe Gln Gly Gln Tyr Cys Arg Asn Phe
 50 55 60
 Gly Cys Cys Glu Asp Arg Asp Asp Gly Cys Val Thr Glu Phe Tyr
 65 70 75
 Ala Ala Asn Ala Leu Cys Tyr Cys Asp Lys Phe Cys Asp Arg Glu
 80 85 90
 Asn Ser Asp Cys Cys Pro Asp Tyr Lys Ser Phe Cys Arg Glu Glu
 95 100 105
 Lys Glu Trp Pro Pro His Thr Gln Pro Trp Tyr Pro Glu Gly Cys
 110 115 120
 Phe Lys Asp Gly Gln His Tyr Glu Glu Gly Ser Val Ile Lys Glu
 125 130 135
 Asn Cys Asn Ser Cys Thr Cys Ser Gly Gln Gln Trp Lys Cys Ser
 140 145 150
 Gln His Val Cys Leu Val Arg Ser Glu Leu Ile Glu Gln Val Asn
 155 160 165
 Lys Gly Asp Tyr Gly Trp Thr Ala Gln Asn Tyr Ser Gln Phe Trp
 170 175 180
 Gly Met Thr Leu Glu Asp Gly Phe Lys Phe Arg Leu Gly Thr Leu
 185 190 195
 Pro Pro Ser Pro Met Leu Leu Ser Met Asn Glu Met Thr Ala Ser